

colour; on the sides of the third and fourth segments is a triangular group of three large brownish-yellow horny spots, the ordinary tubercular dots on other parts of the body are very minute, each with a fine short bristly hair, and a faintly paler ring round its base; the spiracles black, the narrow plate of yellowish-brown on the fore part of the anal segment has its front margin rather bluntly pointed in the centre, that of the anal flap is of the same shining colour, flattened, but with a little raised ridge round behind, from which proceeds a few short bristly hairs, the ventral and anal legs tipped with brown hooks, the skin of the body is smooth but without gloss.

The pupa is subterranean but often lies only a short distance beneath the surface, and sometimes is scarcely buried amongst vegetable remains slightly held together by a few threads of silk; it is five-sixteenths of an inch in length, and of the usual *Noctua* form, stout across the thorax, the abdomen tapering and ending with two fine points: its colour for a time is very pale brown, afterwards dark brown, its surface shining.

Emsworth: *August 11th*, 1881.

TWO NEW SPECIES OF *ICHNEUMONIDÆ*.

BY E. PARFITT.

MESOLEIUS BRACHYACANTHUS.

Black, head wider than the thorax, mouth and palpi straw-yellow. Antennæ black above, ferruginous beneath, the basal joint very small, the second rather large, with an arched protuberance above. Thorax gibbous, smooth, shining black, very finely punctured; mesothorax with two short, lateral, concave spines; the metathorax with two raised lines crossing each other at nearly right angles, forming a St. Andrew's cross. Wings ample, with a faint smoky tinge, and beautifully iridescent; stigma and nerves testaceous, all growing paler towards the base, where they are pale straw-yellow, scale pale yellow, cellule 4-angled, irregular, oblique. Legs: anterior coxæ, and trochanters, the first testaceous-yellow, the second pale sulphur-yellow, the posterior black, with the apex of the trochanters pale sulphur-yellow. Anterior and median femora testaceous-yellow, posterior piceous, with a dark stain on the inside towards the base, where it is pale yellow. Anterior tibiæ and tarsi pale yellow, the apical joints of the tarsi fuscous or nearly black; posterior testaceous, the apex and tarsi nearly black. Abdomen black, cylindrical, but growing gradually larger towards the apex, finely, not deeply, punctured, the base of the first segment with two testaceous-yellow spots, all the rest have their apices pale testaceous.

Length, ♂, $2\frac{3}{4}$ lines; expanse of wings, $4\frac{1}{2}$ lines.

I have two specimens of this species, both males, they were captured in the neighbourhood of Exeter, 1879, and, up to the present, I have not seen another.

HEMITELES GYRINI.

♂. Head, thorax, and scutellum black, head somewhat square, wider than the thorax; mouth ferruginous, palpi pale straw-colour. Antennæ: black above, piceous beneath, the basal joint large, inflated, with a deeply impressed annulus near the apex, second joint pale yellow at the base; all densely pubescent. Thorax smooth in front, the rest clothed with a yellowish pubescence. Wings ample, hyaline, iridescent, stigma and nerves dark piceous, the base and scale pale yellowish. Legs pale reddish straw-colour, the claws of the anterior pair, and the intermediate and posterior tarsi dark fuscous. Abdomen elongate-clavate, peduncle black, the first three segments, and the base of the fourth red, the rest black, the first is slightly contracted in the middle, and depressed above, with two black dots, one on each side of the medial line, the whole rather densely pilose. Length, $2\frac{1}{2}$ lines.

♀. Head, thorax, and scutellum black, mouth black, prothorax with two deeply impressed lines ending at the base of the scutellum. Scutellum small, cordate, with a deep impressed line running round it. Antennæ, a fac-simile of those of the male, except that they are black; length, $1\frac{3}{4}$ lines. Wings ample, iridescent, stigma and nervures black, base pale, scale whitish. Legs bright red, anterior claws, middle tarsi, the base and apex of the posterior tibiæ, and tarsi, entirely black. Abdomen elliptical, peduncle shining black, with two longitudinal impressed lines, the first, second, and third segments red, the latter with a black fascia, the rest black, with their extreme apices whitish. Ovipositor black; length, $\frac{3}{4}$ line. Length, 2 lines.

This interesting species was bred from the pupa-cases of *Gyrinus natator*: the male came out either in the autumn of 1880 or early in 1881, as the pupæ were put into a box and were not looked at till the spring. The females were bred from pupæ collected this spring, and the insects came out in July.

I am indebted to the Rev. J. Hellins for these: he collected the pupa-cases of the *Gyrinus* on the heads of rushes and other water plants growing by the side of the Exeter Canal. I am somewhat at a loss to know at what stage the larva of the *Gyrinus* is attacked; I thought at first, when examining the male, it being so densely pubescent, that this species attacked the beetle-larvæ while still in the water, but now that I am acquainted with the female, and find that she is not so pubescent, I do not think this can be so. It is probable that the larva is attacked while ascending the stem of the plant, or, perhaps, when it has made itself a cocoon, as the female is provided with an ovipositor sufficiently long to pierce through the pupa-case.

The cases are made of the seeds or flower-heads, or any materials within reach of the little beetle-larvæ.

Exeter: August 4th, 1881.